Revised Common Framework of CBCS for PBSC w.e.f..2019-20

Table-1: B.Sc.(MPC) SEMESTER - I

S.NO	Course	Course Code	Part No	Type of the Paper	Total Marks	IA TEST	Sem End Exam	Teaching Hours	Credits
1	English-I	**ENGT11A**	I	Second Language	100	25	75	4	3
2	Telugu-I	**TELT11**	I	First Language	100	25	75	4	3
3	Hindi-I	**HINT11**	I	First Language	100	25	75	4	3
4	Environmental Studies	**AEC002**	III	Foundation Course	50	10	40	2	2
5	Communication and Soft Skills-I	**AEC003A**	II	Foundation Course	50	10	40	2	2
6	Differential Equations	**MATT11A**	II	Core	100	25	75	6	5
7	Mechanics and Properties of Matter	**PHYT11A**	II	Core	100	25	75	4	3
8	Physical & General Chemistry	**CHET11**	II	Core	100	25	75	4	3
9	Physics-I	**PHYP11**	II	Core Lab	50	10	40	2	2
10	Chemistry-I	**CHEP11**	II	Core Lab	50	10	40	2	2

Table-2: B.Sc.(MPC) SEMESTER - II

S.NO	Course	Course Code	Part No	Type of the Paper	Total Marks	IA TEST	Sem End Exam	Teaching Hours	Credits
1	English-II	ENGT21A	I	Second Language	100	25	75	4	3
2	Telugu-II	TELT21	I	First Language	100	25	75	4	3
3	Hindi-II	HINT21	I	First Language	100	25	75	4	3
4	Value Education	**AEC 016**	III	Foundation Course	50	10	40	2	2
5	Information and Communication Technology	AEC004	III	Foundation Course	50	10	40	2	2
6	Differential Equations, Number Theory & Three Dimensional Geometry	MATT21	II	Core	100	25	75	6	5
7	Waves & Oscillations	PHYT21	II	Core	100	25	75	4	3

8	Inorganic & Organic Chemistry-I	CHET21	II	Core	100	25	75	4	3
9	Physics-II Practical	PHYP21	II	Core Lab	50	10	40	2	2
10	Chemistry-II Practical	CHEP21	II	Core Lab	50	10	40	2	2

Table-3: B.Sc.(MPC) SEMESTER - III

S.NO	Course	Course Code	Part No	Type of the Paper	Total Marks	IA TEST	Sem End Exam	Teaching Hours	Credits
1	Telugu-III	**TELT01**	I	First Language	100	25	75	4	3
2	Hindi-III	**HINT01**	I	First Language	100	25	75	4	3
3	Communication and Soft Skills-II	**AEC006**	III	Foundation Course	50	10	40	2	2
4	Communication and Soft Skills-III	**AEC010**	III	Foundation Course	50	10	40	2	2
5	Leadership Education	**AEC011**	III	Foundation Course	50	10	40	2	2
6	Abstract Algebra	**MATT31**	II	Core	100	25	75	6	5
7	Wave Optics	**PHYT31**	II	Core	100	25	75	4	3
8	Inorganic and Organic Chemistry-II	**CHET31**	II	Core	100	25	75	4	3
9	Physics-III Practical	**PHYP31(Pr)**	II	Core Lab	50	10	40	2	2
10	Chemistry-III Practical	**CHEP31(Pr)**	II	Core Lab	50	10	40	2	2

Table-4: B.Sc.(MPC) SEMESTER - IV

S.NO	Course	Course Code	Part No	Type of the Paper	Total Marks	IA TEST	Sem End Exam	Teaching Hours	Credits
1	English-III	ENGT01	I	First Language	100	25	75	4	3
2	Analytical Skills	AEC007	III	Foundation Course	50	10	40	2	2
3	Entrepreneurship	AEC008	III	Foundation Course	50	10	40	2	2
4	Information and Communication Technology-II	AEC009	III	Foundation Course	50	10	40	2	2

5	Real Analysis	MATT41	II	Core	100	25	75	6	5
6	Thermodynamics and Radiation Physics	PHYT41	II	Core	100	25	75	4	3
7	Spectroscopy and Physical Chemistry	CHET41	II	Core	100	25	75	4	3
8	Physics-IV Practical	PHYP41	II	Core Lab	50	10	40	2	2
9	Chemistry-IV Practical	CHEP41	II	Core Lab	50	10	40	2	2

Table-5: B.Sc.(MPC) SEMESTER -V

S.NO	Course	Course Code	Part No	Type of the Paper	Total Marks	IA TEST	Sem End Exam	Teaching Hours	Credits
1	Ring Theory and Vector Calculus	**MATT51**	II	Core	100	25	75	5	5
2	Linear Algebra	**MATT52**	II	Core	100	25	75	5	5
3	Electricity, Magnetism and Electronics	**PHYT51**	II	Core	100	25	75	4	3
4	Modern Physics	**PHYT52**	II	Core	100	25	75	4	3
5	Inorganic, Organic and Physical Chemistry-I	**CHET51**	II	Core	100	25	75	4	3
6	Inorganic, Organic and Physical Chemistry-II	**CHET52**	II	Core	100	25	75	4	3
7	Electricity, Magnetism and Electronics Lab	**PHYP51 (Pr)**	II	Core	50	10	40	2	2
8	Organic Chemistry Lab	**CHEP51 (Pr)**	II	Core Lab	50	10	40	2	2
9	Modern Physics Lab	**PHYP52 (Pr)**	II	Core Lab	50	10	40	2	2
10	Physical Chemistry Lab	**CHEP52 (Pr)**	II	Core Lab	50	10	40	2	2

Table-6: B.Sc. (MPC) SEMESTER - VI

S.NO	**Course**	**Course Code**	**Part No**	**Type of the Paper**	**Total Marks**	**IA TEST**	**Sem End Exam**	**Teaching Hours**	**Credits**
1	Numerical Analysis	MAT TEL61	II	Elective	100	25	75	5	5
2	Analog and Digital Electronics	PHY TEL61	II	Elective A	100	25	75	4	3

3	Materials Science	PHY TEL62	II	Elective B	100	25	75	4	3
4	Analog and Digital Electronics Lab	PHY PEL61	II	Elective A	50	10	40	2	2
5	Materials Science Lab	PHY PEL62	II	Elective B	50	10	40	2	2
6	Analytical Methods in Chemistry	CHE TEL61	II	Elective A	100	25	75	4	3
7	Environmental Chemistry	CHE TEL62	II	Elective B	100	25	75	4	3
8	Analytical Methods in Chemistry Lab	CHE PEL61	II	Elective	50	10	40	2	2
9	Environmental Chemistry Lab	CHE PEL62	II	Elective	50	10	40	2	2
10	Laplace Transforms and its Applications	MAT TCL61	II	Cluster A	100	25	75	5	5
11	Fourier Series and Fourier Transforms	MAT TCL62	II	Cluster A	100	25	75	5	5
12	Advanced Numerical Analysis	MAT TCL63	II	Cluster A	100	25	75	5	5
13	Discrete Mathematics	MAT TCL64	II	Cluster B	100	25	75	5	5
14	Graph Theory	MAT TCL65	II	Cluster B	100	25	75	5	5
15	Special Functions	MATTCL66	II	Cluster B	100	25	75	5	5
16	Introduction to Microprocessors and Microcontrollers	PHY TCL61	II	Cluster A	100	25	75	4	3
17	Computational Methods and Programming	PHY TCL62	II	Cluster A	100	25	75	4	3
18	Electronic Instrumentation	PHY TCL63	II	Cluster A	100	25	75	4	3
19	Introduction to Microprocessors and Microcontrollers-Lab	PHY PCL61	II	Cluster A	50	10	40	2	2
20	Computational Methods and Programming-Lab	PHY PCL62	II	Cluster A	50	10	40	2	2

21	Electronic Instrumentation- Lab	PHY PCL63	II	Cluster A	50	10	40	2	2
22	Fundamentals of Nanoscience	PHY TCL64	II	Cluster B	100	25	75	4	3
23	Renewable Energy	PHY TCL65	II	Cluster B	100	25	75	4	3
24	Computational Methods and Programming	PHY TCL66	II	Cluster B	100	25	75	4	3
25	Practical -VIII(B1)	PHY PCL64	II	Cluster B	50	10	40	2	2
26	Practical -VIII(B2)	PHY PCL65	II	Cluster B	50	10	40	2	2
27	Practical -VIII(B3)	PHY PCL66	II	Cluster B	50	10	40	2	2
28	Polymer Chemistry	CHE TCL61	II	Cluster A	100	25	75	4	3
29	Instrumental Methods of Analysis	CHE TCL62	II	Cluster A	100	25	75	4	3
30	Analysis of Drugs, Foods, Dairy Products and Biochemical Analysis	CHE TCL63	II	Cluster A	100	25	75	4	3
31	Organic Synthesis Lab	CHE PCL61	II	Cluster A	50	10	40	2	2
32	Green Chemistry Lab	CHE PCL62	II	Cluster A	50	10	40	2	2
33	Fuel chemistry and batteries	CHE TCL64	II	Cluster B	100	25	75	4	3
34	Inorganic materials of industrial importance	CHE TCL65	II	Cluster B	100	25	75	4	3
35	Analysis of applied industrial products	CHE TCL66	II	Cluster B	100	25	75	4	3
36	Practical -VIII(B1)	CHE PCL64	II	Cluster B	50	10	40	2	2
37	Practical -VIII(B2)	CHE PCL65	II	Cluster B	50	10	40	2	2
38	Organic spectroscopic techniques	CHE TCL67	II	Cluster C	100	25	75	4	3
39	Advanced organic reactions	CHE TCL68	II	Cluster C	100	25	75	4	3
40	Pharmaceutical and medicinal chemistry	CHE TCL69	II	Cluster C	100	25	75	4	3
41	Practical -VIII(C1)	CHE PCL67	II	Cluster C	50	10	40	2	2
42	Practical -VIII(C2)	CHE PCL68	II	Cluster C	50	10	40	2	2
43	Project Work	CHE PWCL63	II	Cluster	50	10	40	2	5

Revised Common Framework of CBCS for PBSC w.e.f..2019-20

Table-1: B.Sc.(MPC) SEMESTER - I

S.NO	Course	Course Code	Part No	Type of the Paper	Total Marks	IA TEST	Sem End Exam	Teaching Hours	Credits
1	English-I	**ENGT11A**	I	Second Language	100	25	75	4	3
2	Telugu-I	**TELT11**	I	First Language	100	25	75	4	3
3	Hindi-I	**HINT11**	I	First Language	100	25	75	4	3
4	Environmental Studies	**AEC002**	III	Foundation Course	50	10	40	2	2
5	Communication and Soft Skills-I	**AEC003A**	II	Foundation Course	50	10	40	2	2
6	Differential Equations	**MATT11A**	II	Core	100	25	75	6	5
7	Mechanics and Properties of Matter	**PHYT11A**	II	Core	100	25	75	4	3
8	Physical & General Chemistry	**CHET11**	II	Core	100	25	75	4	3
9	Physics-I	**PHYP11**	II	Core Lab	50	10	40	2	2
10	Chemistry-I	**CHEP11**	II	Core Lab	50	10	40	2	2

Table-2: B.Sc.(MPC) SEMESTER - II

S.NO	Course	Course Code	Part No	Type of the Paper	Total Marks	IA TEST	Sem End Exam	Teaching Hours	Credits
1	English-II	ENGT21A	I	Second Language	100	25	75	4	3
2	Telugu-II	TELT21	I	First Language	100	25	75	4	3
3	Hindi-II	HINT21	I	First Language	100	25	75	4	3
4	Value Education	**AEC 016**	III	Foundation Course	50	10	40	2	2
5	Information and Communication Technology	AEC004	III	Foundation Course	50	10	40	2	2
6	Differential Equations, Number Theory & Three Dimensional Geometry	MATT21	II	Core	100	25	75	6	5
7	Waves & Oscillations	PHYT21	II	Core	100	25	75	4	3

8	Inorganic & Organic Chemistry-I	CHET21	II	Core	100	25	75	4	3
9	Physics-II Practical	PHYP21	II	Core Lab	50	10	40	2	2
10	Chemistry-II Practical	CHEP21	II	Core Lab	50	10	40	2	2

Table-3: B.Sc.(MPC) SEMESTER - III

S.NO	Course	Course Code	Part No	Type of the Paper	Total Marks	IA TEST	Sem End Exam	Teaching Hours	Credits
1	Telugu-III	**TELT01**	I	First Language	100	25	75	4	3
2	Hindi-III	**HINT01**	I	First Language	100	25	75	4	3
3	Communication and Soft Skills-II	**AEC006**	III	Foundation Course	50	10	40	2	2
4	Communication and Soft Skills-III	**AEC010**	III	Foundation Course	50	10	40	2	2
5	Leadership Education	**AEC011**	III	Foundation Course	50	10	40	2	2
6	Abstract Algebra	**MATT31**	II	Core	100	25	75	6	5
7	Wave Optics	**PHYT31**	II	Core	100	25	75	4	3
8	Inorganic and Organic Chemistry-II	**CHET31**	II	Core	100	25	75	4	3
9	Physics-III Practical	**PHYP31(Pr)**	II	Core Lab	50	10	40	2	2
10	Chemistry-III Practical	**CHEP31(Pr)**	II	Core Lab	50	10	40	2	2

Table-4: B.Sc.(MPC) SEMESTER - IV

S.NO	Course	Course Code	Part No	Type of the Paper	Total Marks	IA TEST	Sem End Exam	Teaching Hours	Credits
1	English-III	ENGT01	I	First Language	100	25	75	4	3
2	Analytical Skills	AEC007	III	Foundation Course	50	10	40	2	2
3	Entrepreneurship	AEC008	III	Foundation Course	50	10	40	2	2
4	Information and Communication Technology-II	AEC009	III	Foundation Course	50	10	40	2	2

5	Real Analysis	MATT41	II	Core	100	25	75	6	5
6	Thermodynamics and Radiation Physics	PHYT41	II	Core	100	25	75	4	3
7	Spectroscopy and Physical Chemistry	CHET41	II	Core	100	25	75	4	3
8	Physics-IV Practical	PHYP41	II	Core Lab	50	10	40	2	2
9	Chemistry-IV Practical	CHEP41	II	Core Lab	50	10	40	2	2

Table-5: B.Sc.(MPC) SEMESTER -V

S.NO	Course	Course Code	Part No	Type of the Paper	Total Marks	IA TEST	Sem End Exam	Teaching Hours	Credits
1	Ring Theory and Vector Calculus	**MATT51**	II	Core	100	25	75	5	5
2	Linear Algebra	**MATT52**	II	Core	100	25	75	5	5
3	Electricity, Magnetism and Electronics	**PHYT51**	II	Core	100	25	75	4	3
4	Modern Physics	**PHYT52**	II	Core	100	25	75	4	3
5	Inorganic, Organic and Physical Chemistry-I	**CHET51**	II	Core	100	25	75	4	3
6	Inorganic, Organic and Physical Chemistry-II	**CHET52**	II	Core	100	25	75	4	3
7	Electricity, Magnetism and Electronics Lab	**PHYP51 (Pr)**	II	Core	50	10	40	2	2
8	Organic Chemistry Lab	**CHEP51 (Pr)**	II	Core Lab	50	10	40	2	2
9	Modern Physics Lab	**PHYP52 (Pr)**	II	Core Lab	50	10	40	2	2
10	Physical Chemistry Lab	**CHEP52 (Pr)**	II	Core Lab	50	10	40	2	2

Table-6: B.Sc. (MPC) SEMESTER - VI

S.NO	**Course**	**Course Code**	**Part No**	**Type of the Paper**	**Total Marks**	**IA TEST**	**Sem End Exam**	**Teaching Hours**	**Credits**
1	Numerical Analysis	MAT TEL61	II	Elective	100	25	75	5	5
2	Analog and Digital Electronics	PHY TEL61	II	Elective A	100	25	75	4	3

3	Materials Science	PHY TEL62	II	Elective B	100	25	75	4	3
4	Analog and Digital Electronics Lab	PHY PEL61	II	Elective A	50	10	40	2	2
5	Materials Science Lab	PHY PEL62	II	Elective B	50	10	40	2	2
6	Analytical Methods in Chemistry	CHE TEL61	II	Elective A	100	25	75	4	3
7	Environmental Chemistry	CHE TEL62	II	Elective B	100	25	75	4	3
8	Analytical Methods in Chemistry Lab	CHE PEL61	II	Elective	50	10	40	2	2
9	Environmental Chemistry Lab	CHE PEL62	II	Elective	50	10	40	2	2
10	Laplace Transforms and its Applications	MAT TCL61	II	Cluster A	100	25	75	5	5
11	Fourier Series and Fourier Transforms	MAT TCL62	II	Cluster A	100	25	75	5	5
12	Advanced Numerical Analysis	MAT TCL63	II	Cluster A	100	25	75	5	5
13	Discrete Mathematics	MAT TCL64	II	Cluster B	100	25	75	5	5
14	Graph Theory	MAT TCL65	II	Cluster B	100	25	75	5	5
15	Special Functions	MATTCL66	II	Cluster B	100	25	75	5	5
16	Introduction to Microprocessors and Microcontrollers	PHY TCL61	II	Cluster A	100	25	75	4	3
17	Computational Methods and Programming	PHY TCL62	II	Cluster A	100	25	75	4	3
18	Electronic Instrumentation	PHY TCL63	II	Cluster A	100	25	75	4	3
19	Introduction to Microprocessors and Microcontrollers-Lab	PHY PCL61	II	Cluster A	50	10	40	2	2
20	Computational Methods and Programming-Lab	PHY PCL62	II	Cluster A	50	10	40	2	2

21	Electronic Instrumentation- Lab	PHY PCL63	II	Cluster A	50	10	40	2	2
22	Fundamentals of Nanoscience	PHY TCL64	II	Cluster B	100	25	75	4	3
23	Renewable Energy	PHY TCL65	II	Cluster B	100	25	75	4	3
24	Computational Methods and Programming	PHY TCL66	II	Cluster B	100	25	75	4	3
25	Practical -VIII(B1)	PHY PCL64	II	Cluster B	50	10	40	2	2
26	Practical -VIII(B2)	PHY PCL65	II	Cluster B	50	10	40	2	2
27	Practical -VIII(B3)	PHY PCL66	II	Cluster B	50	10	40	2	2
28	Polymer Chemistry	CHE TCL61	II	Cluster A	100	25	75	4	3
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41	Practical -VIII(C1)	CHE PCL67	II	Cluster C	50	10	40	2	2
42	Practical -VIII(C2)	CHE PCL68	II	Cluster C	50	10	40	2	2
43	Project Work	CHE PWCL63	II	Cluster	50	10	40	2	5